**Biosupercapacitors**

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The lecture will overview recent progress in the development of biosupercapacitors – supercapacitors fabricated using biological materials. In conventional biosupercapacitors the biomaterial serves as the pseudocapacitive component [1, 2], while in self-charging biodevices the biocomponent also functions as the biocatalyst [3, 4]. The performance characteristics of biosupercapacitors are summarised and characterised in the perspective of the broader family of electric power devices [5], including biodevices [6]. Self-charging biosupercapacitors show great promise in pulse-power delivery at the milliwatt level, typically greatly exceeding the capability of free-running bio-fuel and bio-solar cells [7]. Thus, chemical biosupercapacitors might be suitable for powering a new generation of miniaturized electronic applications [8-13], including those intended for use in medical technology, while solar biodevices might be used as highly functional, but at the same time low-cost, environmentally friendly, and technically undemanding electric power sources [14,15].

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